SNIGDHAYAN MAHANTA, University of Toronto, 40 St. George Street, Room 6290, Toronto, ON M5S 2E4 *DG categories in noncommutative geometry*

The role of DG (differential graded) categories in noncommutative geometry will be discussed. A notion of noncommutative motives due to Kontsevich will be introduced in this setting. It can be regarded as an algebraic analogue of the analytic endomotives studied by Connes–Consani–Marcolli. Within this framework a special class of Calabi–Yau ones will be introduced and studied.